OWNERS

- In which of these project phases, as an owner, do you feel the need of BIM adoption
  - Pre Project Planning
  - Conceptual Design
  - Preliminary Design and development
  - Construction Documention
  - Operation and maintenance
  - For Construction field work and management
- Decision to implement BIM
  - When
  - Who
  - Resources Used
- BIM Data
  - How many projects used BIM in any one of those areas
    - Do you feel you had any advantages
      - In $$$
  - How many projects completed with BIM as a tool vs total projects completed in the past year
  - Future: How many projects do you predict you will use BIM (next 12 months)
    - Any strategies
    - Any organizational changes expected or made?
  - Comments on any pilot projects
    - How was BIM first adopted?
    - fully/phased pilot projects
  - How do you visualize BIM' in your organization
    - Unimportant
    - Business Opportunity
    - Minor operational changes
    - Major changes and investment
- What does your organization feel in terms of barriers in adopting BIM on projects
  - Legal/Contractual Requirements
  - Software/Hardware availaility
  - Financial Constraints
  - Knowledge of BIM/Training
  - Availability of BIM technical support
  - Stakeholder reaction
  - Designer/Architect/Contractor do not have abilities to use BIM
  - Support from management / team
  - Other/Comments/thoughts
- Which of these factors does your organization find significant in terms of adoption of BIM
- Case Studies available
  - Did the cost to implement BIM outweigh the benefit?
  - Delivery Method on that project
  - Who decided to implement BIM
- **General Information**
  - Name and Organization
  - Number of employees BIM proficient vs total staff
  - In what region does your organization work? - State
    - Northeast/West/South/Outside US/Global
- Have you been involved in fully coordinated BIM Project
  - Yes
    - **Do you have an execution plan on a BIM related project**
      - get a copy
        - Documented/Not Documented
      - Who attends these meetings?
      - BIM Strategies
  - No
    - Future: Do you think you will be adopting BIM for any project in the next 12 months
      - Full/Partial
        - Any pilot projects planned
      - Reasons for the change
- Contractual Requirements
  - How has BIM changed the contract language?
  - Any incentives/constraints applied on BIM methods on projects
    - BIM model sharing required
    - Financial provisions supported/prohibited use of BIM
  - Risk Management Structure
    - Has BIM shifted the risk of a project to other party?
    - Do you think risk has lowered and is equally distributed?
  - Any changes in the project delivery methods?
- **What was the primary driver to adopt BIM for an owner**
  - List Probes
  - Cost reliability and management
    - Owner Awareness
      - What software used
    - How reliable were the estimates
    - How quick were the estimates comparing it to a traditional approach - 2D drawings
  - Time to Market
    - Were the project completion dates accurate?
      - How much closer was the Final Schedule in comparision with the projects which do not use BIM
      - How much closer was the final completion date in comparison with the official completion date
        - months early / late
    - Did you have lesser field conflicts because of a coordinated project?
      - Thoughts about savings on time
      - Thoughts about savings in money
  - Increasing complexity in infrastruture and management
    - Adopted BIM because of complex building like hospital/Data Centres
  - Sustainability
    - Reduce energy costs through energy analysis
  - Labor Shortages
    - Prefabrication - less field labor
    - Overall Cost benefits
  - Design Assesment
    - Project stakeholders/owner giving valuable inputs
      - Lesser 'owner changes'
      - Visualization was easy
        - Owners looking into emergency plans
        - Rental spaces
  - Asset Management
    - Did the owner have access to models
- Which of these purposes as an owner you have accomplished/or would like to see in the future
  - Probes
  - Visualization
    - Increase stakeholder inputs
    - More coordinated meetings with the project participants
  - Automated Quantity Take offs
  - Cost Estimation
  - 4d scheduling
  - Daylight analysis/Energy analysis
  - Structural analysis
  - Scheduling Risks
  - Fabrication ease